Commonwealth of Kentucky Division for Air Quality

PERMIT STATEMENT OF BASIS

CONDITIONAL MAJOR (FINAL PERMIT) No. F-06-065 R1
Green Tokai Company, LTD
Maysville, KY 41056
MAY 10, 2007
IL-WON SHIN, REVIEWER

SOURCE ID: 21-161-00035

SOURCE A.I. #: 39209

ACTIVITY ID: APE20070001

SOURCE DESCRIPTION:

Green Tokai Company (GTC) manufactures a variety of plastic and rubber automotive products for use in interior and exterior sealing and trim applications. These parts are produced primarily on one of six plastic extrusion lines operated at GTC's Mayville, Kentucky facility. For any of the six lines, the process begins by applying an adhesive coating to a continuously moving metallic strip or wire. Polyvinyl chloride (PVC) or thermoplastic olefin (TPO) resin is then extruded over top of the metal core. The extruded plastic strip is then coated with an adhesive and sent through and electrostatic booth where a granulated nylon flocking material is applied. The continuous strip is then cut to length and cured in an electric drying oven. The only exception to this sequence is that Extrusion Line #5 does not utilize the flocking station.

The raw extrusions are then finished into the final part through processing in one or more of many secondary and finishing work cells. These finish cells perform such operations as installation of mounting hardware, molding of end caps and bending to shape. Small quantities of solvent cleaners, primers and adhesives may be used in these finish cells.

The following air contaminate sources and equipment are currently located within the facility and were described in the 2002 Title V permit (V-01-013): Five Existing Extrusion Lines 01 through 05. Permit revision V-01-013 R1 was issued on January 6, 2006 authorizing the addition of Extrusion Line #6 as Emission Unit 07. The finishing lines (Emission Unit 06) are insignificant activities.

GTC had been working diligently over the past 18 months to identify a strategy for reducing hazardous air pollutant (HAP) emissions so as to become a Conditional Major source and avoid the upcoming MACT requirements. Division for Air Quality (DAQ) received the application for the initial Conditional Major permit on September 28, 2006 and the application was considered to satisfy GTC's five-year renewal requirement. The facility accepted less than major limitations on HAP emissions and all sources were transferred to Conditional Major status.

MINOR PERMIT REVISION FOR LIMITATION OF SINGLE HAP EMISSIONS:

GTC was moved from Title V to Conditional Major status with the issuance of Permit F-06-065 on January 11, 2007. The terms of that permit imposed the following plant-wide restrictions:

- 90 TPY VOC;
- 22.5 TPY combined hazardous air pollutant (HAP); and
- 9.9 TPY for each single HAP

The purpose of this revision is to request a minor modification to F-06-065 such that the single HAP

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limit is lowered from 9.9 TPY to 9.0 TPY. Along with this lowered emission rate, GTC is requesting that the monitoring requirement be amended from daily to monthly tracking of single HAP emissions. Reducing the monitoring frequency in this manner will better enable GTC to meet the permit terms with the resources they have available. Further, GTC believes that this proposed monitoring approach is consistent with KDEP's policy for permit limits at or below 90% of the applicable threshold.

COMMENTS:

VOC and HAP emissions are estimated from the maximum rated capacity of the facilities addressed under the operation area of the initial Conditional Major permit and all emission rates are based on mass balance calculations.

Type of control and efficiency:

There is no control for any pollutants in facility.

Emission factors and their source:

Mass balance is used for the emission factors for VOC and HAPS.

Applicable regulations:

- 401 KAR 52:030, *Federally-enforceable permits for nonmajor sources*, applies to sources that accept permit conditions that are legally and practically enforceable to limit their potential to emit (PTE) below the major source thresholds.
- 401 KAR 63:020, *Potentially Hazardous Matter or Toxic Substances*, applies to each affected facility which emits or may emit potentially hazardous matter or toxic substances.

Regulations not applicable:

- 401 KAR 59:225, New miscellaneous metal parts and products surface coating operations, is not applicable since Mason county is currently designated as attainment for ozone, and GTC is not a major source as defined in 401 KAR 59:001 due to the enforceable restriction of VOC contained in their current permit.
- 40 CFR 63 Subpart MMMM, *National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products*. GTC has reviewed the MACT Subpart MMMM that was issued as final on January 2, 2004. The coating operations involving metal coating are potentially regulated by this NESHAP. However, GTC is currently in the process of reformulating their coatings to reduce or eliminate hazardous air pollutants. This effort will result in maximum HAP emissions below the major sources levels. The Conditional Major limitations accepted in Permit F-06-065 eliminate the applicability of this rule.
- 40 CFR 63 Subpart PPPP, National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products. GTC has reviewed the MACT Subpart

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PPPP that was issued as final on April 19, 2004. The coating operations involving PVC and TPO coating are potentially regulated by this NESHAP. However, GTC is currently in the process of reformulating their coatings to reduce or eliminate hazardous air pollutants. This effort will result in maximum HAP emissions below the major sources levels. The Conditional Major limitations accepted in Permit F-06-065 eliminate the applicability of this rule.

EMISSION AND OPERATING CAPS DESCRIPTION:

The total annual source-wide emissions of volatile organic compounds (VOC), combined hazardous air pollutants (HAP), and any single HAP shall not exceed the following limitations on a twelve month (12) rolling total: [401 KAR 52:030, Section 1]. The initial 12-month compliance demonstration period shall begin on the January 1, 2007.

- (1) VOC emissions shall not exceed 90 TPY.
- (2) Emissions of combined HAP shall not exceed 22.5 TPY.
- (3) Emissions of any single HAP shall not exceed 9.0 TPY.

The source has accepted VOC emission 90 TPY to preclude 401 KAR 50:012 and 59:225. This annual limitation shall not be exceeded during any consecutive twelve months period for the entire source. The addition of extrusion line #6 will not affect this cap, as all six lines will be able to operate under this limit.

PERIODIC MONITORING:

The permittee shall monitor and record the usage of base coats, clear coats, solvents, and clean up solvents or any other VOC/HAP containing material.

OPERATIONAL FLEXIBILITY:

None

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.